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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,987	03/02/2004	Csaba Truckai	DFINE.034CP1	1287

20995 7590 04/08/2008  
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EXAMINER
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YOON, TAE H

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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04/08/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcarter@kmob.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/790,987	<b>Applicant(s)</b> TRUCKAI, CSABA	
	<b>Examiner</b> Tae H. Yoon	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-19, 21 and 23-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-14, 21 and 23-28 is/are rejected.
- 7) ☒ Claim(s) 15-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/14/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

Allowability indicated in the last office action is withdrawn due to new ground of rejection.

Updated information including US Patent No. for the parent application No. 10/456,149 in the beginning of specification is needed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21, and 23-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited “the filler component” in line 6 of claim 21 is confusing and indefinite since it is unclear whether said “the filler component” means “a biocompatible dispersible filler”, “an electrically conductive filler” or “both” since the instantly recited “comprising the steps of” permits any sequences.

The recited “less than about” in claim 21 is indefinite. It has to be either “about” or “less than”. See *Amgen, Inc. v. Chugai Pharmaceutical Co., Ltd.*, 18 USPQ 2d 1016 (Fed. Cir. 1991).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 10, 13 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Burnell-Jones (US 6,207,077).

The recited preamble and intended use has no probative value.

Burnell-Jones teaches luminescent gel coats and moldable resins comprising a polymer, suspending fillers, thixotropic modifiers and phosphorescent pigments in abstract, examples and claims. Silica and glass microspheres (suspending fillers) taught in example 1 would meet the instant filler having the recited thermal conductivity inherently. Said phosphorescent pigments would meet the instant chromophore filler. Various articles such as clothing and fishing nets taught at col. 10, lines 12-43 inherently comprised of filaments. Fillers such as metal powders (col. 15, line 55) and metal and metal-coated fibers (col. 22, line 47 to col. 23, line 3, such as sliced aluminum-foil ribbons) and metallic flake pigments (col. 25, line 9) would meet the instant light reflecting filler absent further limitation.

Thus, the invention lacks novelty.

Claims 8-10, 13 and 14 are rejected under 35 U.S.C. 103(a) as obvious over Burnell-Jones (US 6,207,077) in view of Salyer et al (US 3,359,145), Chen et al (US 5,811,314).or Tobita (US 2002/0090501 A1).

The instant invention further recites employing a ferromagnetic filler over Burnell-Jones who teaches employing metal powders

Salyer et al teach electrically conducting and ferromagnetic metals such as iron, cobalt and nickel at col. 3, lines 40-43. Chen et al (col. 2, lines 18-20) and Tobita (abstract) teach the same.

It would have been obvious to one skilled in the art at the time of invention to utilize metallic filler such as iron, cobalt and nickel of Salyer et al, Chen et al or Tobita in examples of Burnell-Jones since Burnell-Jones teaches employing metal powders encompassing said ferromagnetic filler absent showing otherwise.

Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Laughner et al (US 4,983,648).

Laughner et al teach a polymeric composition containing carbon black (electrically conductive filler), TiO<sub>2</sub> (filler having the recited thermal conductivity), cadmium yellow and phthalyl green (chromophore filler) and antioxidant in table 1.

Other fillers such as glass microspheres (filler having the recited thermal conductivity) and electrically conductive (and light reflecting) fillers such as stainless steel powder are also taught at col. 6, lines 41-45.

Thus, the invention lacks novelty.

Claims 9, 10, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laughner et al (US 4,983,648).

The claim 21 further recites a method of mixing components over Laughner et al who teach melt mixing (using an extruder) in examples 1 and 2.

It would have been obvious to one skilled in the art at the time of invention to mix  $\text{TiO}_2$  or stainless steel powder and/or glass microspheres to an extruder containing a polymer melt for a concentrate in sequence or together in Laughner et al since Laughner et al teach employing such fillers and since adding said fillers in order or together would be a *prima facie* obviousness since there are only a few ways to add two fillers in a polymer.

Claims 8-10, 13, 21 and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schleifstein (US 6,241,914) in view of Laughner et al (US 4,983,648) and Takekoshi et al (US 3,833,546).

Schleifstein teaches electroconductive resin composition containing metal particles in abstract and examples. Other metallic fillers meeting the instant ferromagnetic and light reflecting fillers such as nickel, iron and cobalt are taught at col. 8, lines 25-35.

The instant invention further recites filler having the recited thermal conductivity and a method of mixing over Schleifstein. However, Schleifstein teaches employing additional fillers such as glass beads and bubbles at col. 13, line 6 and said glass beads and bubbles inherently have the recited thermal conductivity. Schleifstein further

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teaches employing pigments (chromophore filler) and oxidation inhibitors at col. 13, lines 15-19. Polysiloxanes used include liquid, a stiff gel, gum and resin which does not flow under the influence of gravity (col. 9, lines 19-23. Thus, a melt of said resin would be needed when mixing fillers and other additives. Use of a curing catalyst is taught at bottom of col. 14 and in examples.

Laughner et al teach a method of mixing in an extruder in examples 1-2, and Takekoshi et al teach use of an inert gas such as nitrogen (in order to avoid undesirable said effects such as oxidation) at bottom of col. 5.

It would have been obvious to one skilled in the art at the time of invention to employ glass beads and bubbles and ferromagnetic and light reflecting fillers and/or pigments in examples of Schleifstein since Schleifstein teaches such modification, and further to mix said components with polysiloxane resin which does not flow under the influence of gravity in an extruder taught by Laughner et al with nitrogen gas purging taught by Takekoshi et al and since adding said fillers in order or together would be a *prima facie* obviousness since there are only a few ways to add two fillers in a polymer and since use of an inert gas such as nitrogen in order to avoid undesirable said effects such as oxidation is a routine practice in the art.

Claims 15-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tae H Yoon  
Primary Examiner  
Art Unit 1796

THY/April 1, 2008

/Tae H Yoon/